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COST *and* MANAGEMENT

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THE SOCIETY OF INDUSTRIAL AND COST ACCOUNTANTS OF CANADA

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COST *and* MANAGEMENT

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J. N. Allan, R.I.A., Secretary-Manager and Editor

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• EDITORIAL •

The Society Revises Its Course

During the past two years, work has been proceeding with the revision of the courses sponsored by the Society and considerable progress has been made. Courses in four subjects will be completely revised and ready for use in the next term. They are: Accounting I, Accounting II, Business Mathematics and Industrial Legislation. The two subjects in Cost Accounting are also under complete revision and will be finished at a later date.

Large sums of money and a great deal of effort on the part of many of our members have been spent on the development and improvement of our various courses, and while the primary objective of this effort is the training of students in the field of Industrial and Cost Accounting, it would indeed be depriving our senior membership of a valuable service if our course material were restricted exclusively to the use of our students, and if the net results were confined to their benefit. This work is of great importance to our senior membership both directly and indirectly and to fully appreciate its value, it is necessary to know something of the process in revising a course.

A syllabus based on the recommendations of the Co-Ordinating Educational Committee is drawn up and constantly amended until it meets with their approval. This syllabus forms the framework for the development of the course itself. The course is written for the Society by someone in the Academic Field who is recognized as an authority on that particular subject. When the course is written, draft copies are reviewed by members of the Co-Ordinating Educational Committee and as may be supposed many suggestions are made for its further refinement. There is close co-operation between the Committee and the Author of the Course and the final result represents the combined effort of a group of men essentially well qualified in the broad field of Industrial and Cost Accounting. It is interesting to note that the members making up this Committee are representative of those fields of activity which are most vitally interested in our Educational Programme and is best indicated by the following breakdown of the Committee Memberships:

Universities	3
Industry	4
Retail	1
Public Accounting	3

From such a representative group it will be appreciated that the courses will be prepared on a sound academic basis and at the same time be designed to meet the practical requirements of business enterprises.

EDITORIAL

Any changes which are made in our courses will, therefore, reflect the trend of thought in respect to fundamental principles in each subject and this information is available to the senior member who wishes to keep abreast of current developments as well as to the student. This is particularly true in such subjects as Cost Accounting, Industrial Organization and Management and Industrial Legislation, where changes take place more rapidly and more extensively than possibly in the other subjects. Although major amendments will be published in Cost and Management from time to time, the complete course material is available to the membership at a nominal charge. Of interest at the moment are the revised lessons in Industrial Legislation, which in addition to dealing with the essential aspects of Mercantile Law, cover such topics as Trade Unions, Labour Contracts, Hours of Work and Vacation with Pay, Unemployment Insurance, Workmen's Compensation, etc. This course has been prepared initially for the Province of Ontario, but will be adapted to meet the requirement of each Province.

The main benefit, indirectly accruing to our membership, through revision of these courses, is the advanced and up to date training given to students of Industrial and Cost Accounting which will provide Industry with more qualified personnel. This is a need which is very acute at the present time and can only be met by means of a comprehensive Educational Programme such as ours. It is rather significant that in almost all business organizations increasingly greater emphasis is being placed upon the educational part of the activities and our Society may be justly proud that it is in the forefront of this field of endeavour.

EXAMINATION DATES

The following are the dates set for the Spring examinations:—

Fundamentals of Cost Accounting	Monday, April 25th
Accounting I	Tuesday, April 26th
Advanced Cost Accounting (Paper 1)	Wednesday, April 27th
Accounting II	Thursday, April 28th
Industrial Organization and Management	Friday, April 29th
Advanced Cost Accounting (Paper 2)	Saturday, April 30th
Business Mathematics	Monday, May 2nd
Industrial Legislation	Tuesday, May 3rd

Candidates are reminded that applications for writing examinations must be filed by April 1st next, accompanied by the prescribed fee.

Members of the Society of Industrial and Cost Accountants of Quebec can obtain forms from Mr. G. B. Clarke, 1201, The Royal Bank Building, Montreal, Que.

Members of the Society of Industrial Accountants of British Columbia can obtain forms from Mr. C. H. Davis, R.I.A., 3538 W. 34th Avenue, Vancouver, B.C.

Members of the Society of Industrial and Cost Accountants of Alberta can obtain forms from Mr. F. H. Ougden, R.I.A., 1439-9th St. N.W., Calgary, Alberta.

Members of the Society of Industrial and Cost Accountants of Saskatchewan can obtain forms from Mr. R. B. VanInderstine, R.I.A., Regina Leader-Post, Regina, Saskatchewan.

Members of the Society of Industrial and Cost Accountants of Manitoba can obtain forms from Mr. A. E. Godsmark, 611 Confederation Life Bldg., Winnipeg, Manitoba.

Non-resident Members and Members of the Society of Industrial and Cost Accountants of Ontario can obtain forms from Mr. J. N. Allan, R.I.A., 66 King St. E., Hamilton, Ontario.

COST AND MANAGEMENT

New Members

Calgary Chapter

Mr. A. L. Lee, 1722 - 12th Avenue West.

Hamilton Chapter

Mr. J. M. Thompson, C.A., Canadian Westinghouse Co., Ltd.

Kitchener Chapter

Mr. Joseph F. Gruzleski, The Callander Foundry & Manufacturing Co., Ltd., Guelph, Ontario.

Mr. Robert O. Verhelst, 153 Park Street, Waterloo, Ontario.

Lethbridge Chapter

Mr. William C. Ireson, 929 - 7th St. A. South.

London Chapter

Mr. G. C. Warden, 21½ Walnut Street.

Toronto Chapter

Mr. Alexander Campbell, 149 Rose Park Drive.

Non-Resident Canadian Society

Tirso Carpizo, Esq., Contador Publico, Mexico, D.F.

Chapter Notes

BAY OF QUINTE

The regular monthly meeting of the Bay of Quinte Chapter of the Society of Industrial and Cost Accountants of Ontario was held in the private dining room of the Bar-B-Q Tavern Restaurant on Monday, January 17th at 6.30 p.m.

Twenty-three members and guests were present to hear Mr. Harvey W. Spry, R.I.A., Cost & Management Consultant of Toronto speak on "Production Control". Special invitation had been extended to the Belleville Superintendents' Association to attend this mutually beneficial talk.

Mr. Spry, introduced by Art Lockley, gave a general outline on various types of controls required in the average industrial concern. He dealt at great length with functional organization of Production Control giving detailed explanation regarding the necessary preliminary sales survey, material and parts procurement, machine and man-hour efficiency, operational sequence and work inspection.

The discussion period that followed Mr. Spry's talk evidenced the importance of the subject to those present. Les Lennox thanked the speaker on behalf of the Chapter.

Carl Casey, Chairman, welcomed new members, Thomas Chappell and Bruce MacRae. Announcement was made of the coming joint meeting at the Kingston Chapter in February. The date of the meeting has not been set, but members will be notified in good time. A good turn out is expected.

CHAPTER NOTES

FORT WILLIAM - PORT ARTHUR CHAPTER

On January the 17th the Chapter held its regular meeting which was attended by forty-two members.

Through the kindness of Mr. R. E. Coddington and the National Cash Register Company those present enjoyed a fine film. The movie gave an interesting insight into the progress of the Company its production methods and its research activities for the betterment of its products. In addition the education of the staff and the various facilities provided to meet the other needs and activities of its personnel were clearly described.

Following the film, the members turned their attention to the technical subject for the evening. Mr. Aitken introduced the question of what advantages could be derived by a firm from the installation of a Cost System. A lively discussion followed and a number of practical and valuable suggestions as to the value of a Cost System to the small businessmen were made.

With the conclusion of the discussion, Mr. R. B. LeCocq introduced the Speaker for the evening, Mr. R. E. Coddington. The latter had with him on display one of the Typewriting-Bookkeeping machines made by the National Cash Register Company, and after some general discussion of the various machines made by the company, Mr. Coddington proceeded to give a demonstration of machine accounting. Many of the members present were keenly interested in the operation of the machine as it applied to Accounts Receivable, Accounts Payable and Payrolls, with the result that many questions were raised as to the operation and application of Typewriting-Bookkeeping machines.

A motion of thanks by Mr. D. R. Harrison was warmly applauded after which the meeting adjourned at 10.00 p.m.

HAMILTON

On Thursday, January 20, 1949, the Hamilton Chapter held its first Employers' Night at the Royal Connaught Hotel with the Chairman, W. C. Sparham presiding. It turned out to be a great success and there were 115 members and guests who sat down for dinner. The head table consisted of the officers of the chapter and executives of some of the larger industries in Hamilton.

Our speaker of the evening was Mr. C. W. Lockard, President, International Harvester Co. of Canada Ltd., whose subject "Agricultural Implements Contribution to our Canadian Economy" was of great interest to all.

Mr. Lockard outlined the Agricultural Implements growth during the last 110 years. He mentioned that the agricultural methods existing during the Dark Ages prevailed until early in the 19th century. It was only 110 years ago when the first steel plow was invented. The speaker next outlined the developments in equipment subsequent to the steel plow right up to the latest equipment being used on our farms and grain lands. He also mentioned that the agricultural industry has made the world wealthier because it has increased its efficiency. It has made

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the world healthier because it has taken the drudgery out of farm life. It has made the world happier because it has raised the standard of living for the people on the farm.

The speaker was introduced by Mr. W. H. Funston, President, Firestone Tire and Rubber Co. of Canada Ltd., and a vote of thanks was expressed on behalf of those present by chapter member R. J. Menary, Deputy City Finance Commissioner.

Mr. Sparham announced that plans were being formulated for discussion meetings on specific subjects. The first meeting of this type would be held in February.

NIAGARA

The Niagara Chapter of the Society of Industrial & Cost Accountants of Ontario held their January meeting on Wednesday last in the Leonard Hotel, St. Catharines.

The speaker, Mr. M. N. Vuchnich, gave a very interesting address on incentive systems and the modern trend toward industrial relationship as practised by his firm, the Lincoln Electric Co. of Canada.

Mr. Vuchnich said that in his opinion, there would be no labour strife if management would educate its employees in an intelligent manner. For instance, his company issues the true facts regarding the financial status of the firm; piecework rates are established and guaranteed not to be reduced for any reason other than change in operation. This allows a worker unlimited earning power dependant upon his skill. The larger proportion of savings affected by this plan, is distributed to the employee. Each employee from the manager down including the office receives a merit bonus, based on the individual's skill, co-operation, attitude, and general demeanour. Each employee is rated and judged individually and independently by four supervisors, their superintendent, production manager, production inspector and standards control. These ratings are translated from points to percentage of earnings and nothing affects the system, such as depressions, temporary slump, etc. In addition to this a cost of living bonus is paid set in accordance with the government index. This is subject to change as the cost of living rises or falls. In addition to this plan, every employee is given an opportunity of purchasing shares in the company payable on a monthly plan. The meeting was presided over by Mr. J. Shea, Coles Hardware, and the speaker was thanked by Mr. T. Lewis, Davis Lumber Co.

KITCHENER

The vitally important announcement of the end of Sunday work as a means of conserving Hydro power was made at the December meeting of Kitchener Chapter, held at the Mutual Life Assurance Co. of Canada, Waterloo, by R. H. Saunders, Chairman of the Hydro-Electric Power Commission of Ontario. For days, labor and industry had awaited an important message from the Hydro chief and he chose the Chapter's meeting to give it. George Egoft, Chairman, officiated at the meeting which was attended by district manufacturers and business heads.

CHAPTER NOTES

Mr. Saunders chose the subject "Your Hydro Chairman Reports" and stated that a six-day and six-night schedule for industry in co-operation with local commissions was now possible. Ontario, he said, would have enough power without imposing blackouts until at least the end of January. Rains and mild weather had improved the hydro situation.

Dealing with frequency conversion from 25 to 60 cycle, the Hydro chief predicted that within 12 years the province should be served with the higher cycle. Industry would be given ample warning in a given area before the changeover was made.

Present also were district Hydro officials and Nelson Allan and Grant Bucknell of the Hamilton office.

OTTAWA

The January meeting of the Ottawa Chapter was held in the Grill of the Alexandra Hotel on the 20th January, 1949.

Mr. R. F. Bruce Taylor, F.C.A., of the Foreign Exchange Control Board, Toronto Office, addressed the gathering on the "Mechanics of Foreign Exchange Control". Mr. Taylor is Past President of the Toronto Chapter and is well known to our members. He is also Editor of "The Chartered Accountant" and President of the Ontario Division of the Canadian Cancer Society.

REGINA - MOOSE JAW CHAPTER

This Chapter held its December meeting in the Grant Hall Hotel, Moose Jaw, on the 16th of December, 1948, with a good attendance of members and four guests.

The speakers of the evening were: Mr. J. P. Golds on "Purchases" and Mr. L. V. Spalding on "Receivings". Mr. Golds used as an example the system in use at the Robin Hood Flour Mills in Moose Jaw. He divided the "Purchases" into two main classes, namely —

- (1) the purchase of raw materials (i.e. grain) used in the manufacture of the products;
- (2) the purchase of all other materials such as operating equipment and supplies for handling and selling the various products.

Under "raw materials" he outlined in detail the system of handling the original purchase of the grain on contract through the Wheat Board, delivery of grain to the Mill, and the testing of the grain from the time it is grown until milled in order to maintain the high standard of uniform quality.

Under "equipment and supplies" he listed —

- (a) the kind of material — cartons, sacks and repairs;
- (b) the purchasing policy of buying the best at the best prices;
- (c) the purchasing problems in keeping the stock of supplies on hand; and
- (d) the purchasing procedure used in keeping stock on hand.

Mr. Golds also outlined the hedging procedure used to protect the Milling Company against the fluctuation of grain prices and numerous other points. The members then held an open discussion, bringing out very many points of interest and considerable discussion.

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The second speaker, Mr. L. V. Spalding, took as his subject "Receivings". Mr. Spalding explained that he wished to make his talk very informal, as these meetings are held for a common purpose, namely, to learn more about our jobs. In following through his talk the speaker used, as an example, the receiving procedure of his own firm, The Swift Canadian Company Limited of Moose Jaw, starting from the time the goods were unloaded on the dock by the truck-driver, and carrying right through until the time when all the papers were gathered together and payment made for the shipment.

Following his talk Mr. Spalding led the usual open discussion regarding many points of mutual interest to the members, and this was found very educational, due to the great variety of points brought out. In closing, Mr. Spalding was asked to outline the receiving procedure for livestock, which is different from the usual receiving procedures, and as an example he used that for hogs.

ST. MAURICE VALLEY CHAPTER NOTES

The first meeting of the New Year took place on Wednesday, January 19th, at the Cascade Inn. Our speaker was Mr. J. B. White, Vice-President and Personnel Manager of the Aluminum Company of Canada, who spoke on Industrial Relations. In the course of his talk, the speaker referred to recent developments in the subject of Personnel Relations and to the difficulty of setting a set policy. In dealing with unions we were dealing with people on a mass basis which could be easily led one way or the other. Management had to consider this problem from both sides and while recognizing the value of a contented labour force, had to consider the price "To make and sell".

Mr. J. H. Gibbs thanked the speaker and Mr. L. O'Connor was in the chair.

TORONTO

The meeting held on January 13th in the Oak Room was attended by the largest dinner gathering in many years. Mr. E. S. Larose, Comptroller of the Bausch and Lomb Optical Co. of Rochester, N.Y., was the guest speaker and his subject "Budgetting".

The fame of Mr. Larose as a speaker and the present day interest in his subject was responsible for the large attendance. Those who attended were not disappointed. The speaker explained in detail the preparation of a sales budget, manufacturing budget, inventory control budget and cash budget and the correlation of all. Mr. Larose stressed the necessity for inventory control and the use of indices in plotting the relation of a manufacturing establishment to the government index. Many other technical points were explained and the audience was thoroughly satisfied that budget control is a very necessary management tool.

Mr. R. S. M. Ausman introduced the speaker and Mr. M. C. Coutts expressed the thanks of the gathering.

Current Literature Digest

By HAROLD BRICKER, C.G.A., R.I.A.

DEPRECIATION

The Australasian Institute of Cost Accountants, in December 1948, issued their Cost Bulletin No. 22, on the subject of DEPRECIATION. Some of the observations and comments should be noted.

All things in the material sense lose their value by the effusion of time or the incidence of use, — they wear out. This loss assumes a very special significance from an accounting viewpoint, — no matter whether in financial, cost or government accounting. It is increasingly important that this loss of value be measured as accurately as possible, so that each accounting period may bear its fair and equitable share of the cost of the use of each asset.

The dictionary definition says, "a loss of value", or "a fall of value". However, the term "DEPRECIATION" has been given such a wide range of interpretations in custom and usage, that inherent defects were experienced. The Institute of Chartered Accountants of England and Wales, in its recommendation concerning the depreciation of fixed assets, used three different terms in the sentence, "Provisions for depreciation, Amortisation and depletion of fixed assets, should be applied on a consistent basis from one period to another." The recommendations then proceed to apply these terms, appropriately, to different kinds of assets.

1. Goodwill and freehold land - - - - (Diminution)
2. Freehold buildings, plant, machinery, tools,
equipment, ships, transport vehicles - - (Depreciation)
(then later the term) - - - - (Obsolescence)
(and also the term) - - - - (Replacement)
3. Leaseholds and patents - - - - (Amortisation)
4. Mines, oil wells, quarries, and other
assets of a wasting character - - - - (Depletion)

Depreciation is regarded as "that portion of the cost of a fixed asset to its owner which is not recoverable when the asset is finally put out of use by him."

The American Institute of Accountants Committee dealing with terminology and procedure, defined depreciation accounting as, "A system of accounting which aims to distribute the cost or other basic value of tangible capital assets over the estimated useful life of the unit, (which may be a group of units), in a systematic and rational manner."

Even this observation is by no means perfect, because depreciation occurs even when there are no operations, and when no income is produced. Furthermore, there is room for debate in the use of the term "fixed assets".

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Accounting for depreciation then implies the apportionment of the deferred charges (for fixed assets) against the operations of the accounting period in which those operations occur and against the income which those operations help to produce.

There are three practical methods of measuring depreciation.

1. TIME, — the number of years in service life.
2. USE, — the estimated number of hours of effective use.
3. PRODUCTION, — the estimated number of units produced in the service life.

The methods of applying depreciation include:

1. The straight line method.
2. The reducing balance method.
3. The revaluation method.
4. The sinking fund method.
5. The annuity method.
6. The compound interest method.

The first two of these methods dominate the outlook of industrialists, with the first gaining increasing popularity in this country, whilst the other four methods are rarely sighted.

Accounting for depreciation involves a great deal of arbitrary judgment and personal opinion, — judgment and opinion, which, of necessity, must be projected many years into the future in the formulation of the depreciation policy.

Engineers and other technical experts have a fair knowledge, backed by experience and data, of the expected normal effective life of many kinds of assets. In any situation, the data on which the depreciation policy is based should be determined as accurately as possible, and on the best advice and information available. This will be much more effective and better than HUNCHES OR WILD GUESSES.

After all is said in regard to the personal opinion regarding depreciation accounting policies, it must be remembered that there has been a schedule of rates set out for taxation purposes, which may differ in each nation but may nevertheless be the depreciation yard stick in that territory.

It might be advisable to have the government taxation schedule at hand, at least for reference purposes, when formulating any depreciation policy.

DEPRECIATION JUGGLING

The standard profit policy is often responsible for the depreciation computation change. The purpose may be to reduce profits in periods of prosperity, having in mind excess profit taxes, or keeping the profit figure standard so that the shareholders will refrain from seeking increased dividends. The reverse may occur in periods of depression. Higher and lower prices may suggest a depreciation adjustment to the REPLACEMENT basis. Any of these changes in the depreciation accounting policy can have, PERHAPS, some advantage in the current financial period. It may be a question of whether the taxes are paid this year or over a period of succeeding years. It may still be only a yard of cloth, no matter how one cuts it. With the possible exception of short term assets, which are absorbed in short periods in any case,

CURRENT LITERATURE DIGEST

it is questionable whether the firm which sticks strictly to the prescribed rates of depreciation will be very far behind any business using FANCY FIGURES, over long term periods, in accounting for asset life and replacement.

THE DECIMAL SYSTEM IN THE STERLING AREAS

Necessity has been referred to as the mother of invention. Due to the streamlined going on with respect to accounting and more recently in the field of cost accounting, and to take advantage of tabulating and other mechanical accounting equipment it has been necessary to make the information fit the machine. In the case of pounds, shillings, and pence, it has been found advantageous, to the accounting staff, to have those denominations by transposition expressed in decimals for computation simplification and speed. For example, the basic value is established in the pound and 29 pounds/ 14 shillings/ 3 pence becomes one figure for value computation as 29.7125.

This information appeared in the November No. 21 Cost Bulletin of the Australasian Institute of Cost Accounts. There also was included a standard conversion table of pounds to dollars, down the value line, 10 pounds to \$40.00, 5 pounds to \$20.00, 1 shilling \$.20, 6 pence to \$.10.

Could this be the thin edge of the wedge which will end in the currency of the world being expressed by and in the decimal system?

THE VALUATION OF ASSETS FOR BALANCE SHEET AND STATEMENT PURPOSES

The Chartered Accountant in Australia published in their December Vol. XIX No. 6, 1948, an account of the Annual Meeting of members. In the discussions on financial statements, the terminology used in describing the method of valuation of assets, — stock in trade, and inventories, presented a picture of bewildering variation of choice of description. The necessity for attention to such qualifications of values with a view to generalization within a smaller group of readily understood terms was revealed in a survey of the published statements of 37 public companies, which disclosed the following methods of valuation of stock on hand;

At valuation	2	At company's valuation	1
Valuation not exceeding cost ..	1	As valued by the board of	
Lower of cost or valuation	1	directors	1
At usual trade values	1	At or below cost	5
At cost or market		At cost or under	6
whichever lower	4	At cost	4
No basis shown	1	At cost or replacement	
At lower or cost market		whichever lower	1
or replacement	1	As per directors' report	1
As certified by general		At cost or less and less	
manager	2	reserves	1
At not exceeding cost	2	Not applicable	2

While this condition was reported from Australia, we could hardly state that no such inventory valuation qualifications appear on Canadian financial statements. It might be interesting to examine this condition in our statements.

How Manufacturers Reduce Their Distribution Costs

Economic Series No. 72, United States Department of Commerce
For sale by the Superintendent of Documents, U.S. Government
Printing Office, Washington 25, D.C.
Price 35 cents U.S.

This 150-page study of the sales practices of a representative group of manufacturing firms which have effectively reduced their marketing expenses and increased their overall profits, opens with the following statement —

No company makes all of its sales at equal profit. In every business there are sales which are much more profitable than the company average and a sizable proportion of other sales which are much less profitable. These are basic facts of business life which marketing executives encounter every day and of which they are fully aware. Yet these commonplace truths hold "secrets" which so far have been uncovered and acted upon by only a few companies.

A total of 127 companies were carefully selected on the basis of information indicating the possibility that they had achieved substantial reduction in their unit marketing costs through improvements in their efficiency. Out of these 127 companies, field visits were made to 45 firms and the case studies obtained from 26 of these 45 manufacturers are included in this factual report. This well written, timely book, amply proves that the use of distribution cost analysis as a management tool presents an opportunity for increasing efficiency and reducing marketing costs.

This book clearly tells how some manufacturers —

Dissipate profits by,

1. Going out for 100 percent coverage of the market regardless of cost.
2. Letting their salesmen spend time and money on unprofitable customers and territories.
3. Judging their marketing operations on the basis of total sales and total profits.

Increase profits by,

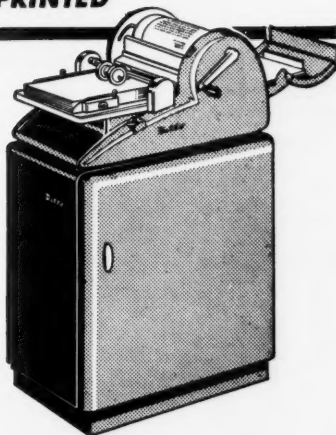
1. Going out for selective distribution.
2. Having their salesmen concentrate on money-making accounts and territories.
3. Using sales and distribution cost analyses to find their profitable and their unprofitable sales.

This is a "how" book, and its 26 case studies, 44 tables and 24 illustrations should make it possible for any reader to make and execute definite plans for distribution expense reduction.

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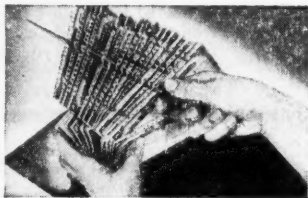
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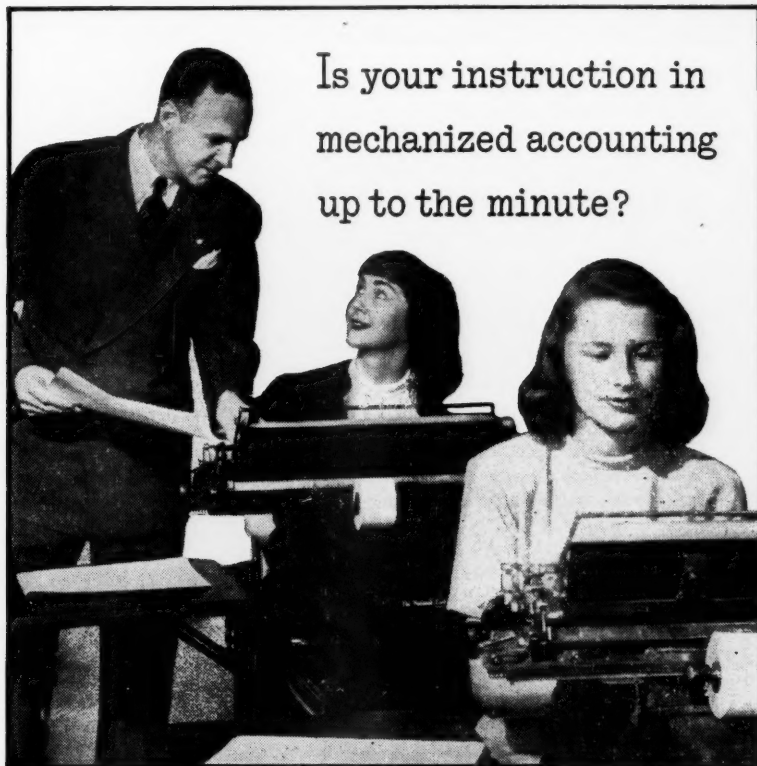
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The Effect of a Fluctuating Monetary Unit on the Income Statement

(An address given to the Montreal Chapter of the Society of Industrial and Cost Accountants of Quebec)

By **KENNETH F. BYRD, M.A., B.Sc. (Econ), A.C.A.,**
Professor of Accounting, McGill University

The title of this address was given to me and I am not sure whether I was meant to confine myself strictly to the **results** of fluctuation in money values, or whether I was not also meant to state my own opinion as to what accountants can do about it. It seems to me that merely to depict the results would be to state the obvious, and I imagine I shall not be exceeding the scope of my subject if I consider suggestions — my own and other people's — for adjusting in the accounts the misleading effects of monetary changes.

I. General

Changing money values will only seriously distort results in the Income Statement where the items affected relate to investments made for periods sufficiently long to allow appreciable changes in money values. In normal circumstances, in other words, it is that portion of fixed assets which is in effect written off to Profit and Loss Account as expired expense that is liable to serious distortion. Similarly any agreement, whether for income or expense (e.g. rent receivable or payable under a long term lease, or interest receivable or payable on long term debentures), which has the effect of carrying fixed periodical monetary credits or debits of a revenue nature into periods when current agreements of a similar nature would be for very different amounts, may have quite a considerable effect on current profits.

II. Inventories

In times of rapidly rising or falling prices the changes in money values may be so constant and so considerable that investments even in merchandise inventories may, by the time they are converted into cash, have assumed a monetary value, whether greater or lower, quite substantially different from that anticipated at the time of original purchase; i.e. the gross and net profits resulting from the sale may, on paper, be out of all proportion to the original investment. Here is, indeed, a very great point of danger in times such as the present, as many directors of companies are aware. The paper profits, in times of rapidly rising prices such as these post-war years, will probably be disproportionately large, because the selling price of merchandise tends to be considerably above that which was in force at the time of purchase of retail articles or the time of manufacture of processed goods. Imagine, for example, the case of a retailer who buys a standard article in quantities which he turns over four times a year, expecting normally to make 25% gross on cost. He buys 5,000 articles on 1st January, paying \$5.00 per article, and has disposed of his stock by 31st March at an average of \$6.75 per article. On 1st February he buys 4,800 articles at \$5.20 each,

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and by 31st March he has sold $\frac{2}{3}$ of these at an average of \$6.90 each. On 1st March he buys 5,100 articles at \$5.40 each, and he has sold $\frac{1}{3}$ of them by March 31st at an average of \$7.00 each. The results can be expressed in a Trading Account as follows:

TRADING ACCOUNT							
for the three months ended 31st March							
	Quantity	Price	\$		Quantity	Price	\$
Purchases	5,000	5	25,000	Sales	5,000	6.75	33,750
"	4,800	5.20	24,960	"	3,200	6.90	22,080
"	5,100	5.40	27,540	"	1,700	7.00	11,900
Gross Profit			16,910	Inventory at ..	(1,600)	5.20	(8,320)
				Cost	(3,400)	5.40	(18,360)
	<u>14,900</u>		<u>94,410</u>		<u>14,900</u>		<u>94,410</u>

The figure of \$16,910 gross profit represents a return of 28.6% on cost of sales (\$59,140) as compared with the anticipated 25%, over the short period of three months. This represents an abnormal profit of (16,910 - 14,785) i.e. \$2,125. On the face of it this appears highly satisfactory, and the owners of the business might feel inclined to draw out correspondingly greater profits from the business. But what they, of course, have to bear in mind is that, month by month, the cost of purchases is rising. Thus, taking the above case, we might take the trader's investment in 100 of his January 1st purchases, which he sells by January 31st at \$6.50 per article, receiving \$650. He uses part of the proceeds to buy 100 of the February 1st purchases at \$5.20, selling them by 28th February at \$6.75, receiving \$675. Finally he uses part of this to buy 100 of his March 1st purchases at \$5.40, selling them by March 31st at \$7.00, receiving \$700. Now what is his profit on these three sales?

	Selling Price	Cost	Profit
January	\$ 650	\$ 500	\$ 150
February	675	520	155
March	700	540	160
	<u>\$ 2,025</u>	<u>\$ 1,560</u>	<u>\$ 465</u>

On the basis of this statement \$465 is his profit but, if he drew this out of his business, (assuming for purposes of simplification that there were no expenses to be paid), he would be leaving himself with insufficient funds to go on trading on the same scale. At February 1st, in order to buy 100 articles to replace those sold in January, he needed \$520. Hence he could withdraw only \$130 of his \$150 profit. Similarly at February 28th he could draw only \$135 of his \$155 profit, and at 31st March only as much as would leave him sufficient to buy another 100 articles at, say \$5.50, i.e. \$150 out of his \$160 profit. In monetary terms, therefore, he has at March 31st \$465 profit on the 100 articles but, if he wishes to continue trading without undercapitalization, he should leave in the business \$50 of this, drawing a maximum of \$415.

This oversimplified illustration proves what management today is striving to make clear to its shareholders, that profits as shown by the accounts in rapidly changing monetary terms, from financial year to

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year, are simply not wholly profits available for dividend to a continuing company. They are not available because, if they are paid out in full, the concern will be forced to carry on with the same capital funds, as far as their monetary expression goes, but with a rapidly decreasing volume of purchasing power. The result will, inevitably, soon be a state of undercapitalization, if the initial position was one of full normal capitalization, and the volume of business will dwindle with a resulting decline of profits, the more so as many expenses will remain fixed or will increase in monetary terms.

III. Depreciation

I shall turn presently to a consideration of any possible means of revealing this state of affairs in the accounts, but let me first refer to the other major item affecting the profits of so many concerns — depreciation. Here the situation and the misleading nature of the accounts, may be more serious because there is no constantly recurring expense, in rapidly changing monetary terms, to emphasize and warn as to what is happening. A company may have spent \$200,000 on plant in pre-war years and that expenditure, with normal repairs, may have taken it right through the war years to the present day, without a hitch, with no need for further capital expenditures. If the plant was bought in 1938 with a 10 year working life then, ignoring scrap value, it will just be coming up for replacement at the present time. Now, depreciation having been set aside each year on original cost at 10% per annum, the Plant Depreciation Reserve will show a credit of \$200,000 representing funds retained out of profits for ten years at \$20,000 per year. But will this \$200,000 today buy a new plant to replace the old? Of course it will not! The present day cost will be something more like \$400,000, simply because, while the dollar today has the same name and the same appearance, in paper or coinage, it obviously has only a fraction, perhaps, half, of the pre-war purchasing value, i.e., the value in terms of goods. Suppose then, that the concern in question while meticulously charging depreciation on historical cost, has distributed as a dividend each year the remaining so-called profit up to the hilt, it must inevitably find itself undercapitalized, as regards this particular plant, to the extent of \$200,000. While it has done nothing illegal and its issued capital will on paper still remain intact, it is not in a position to carry on its normal business activities without going to the public for further funds, in shares or debentures, not for expansion of the business but simply for its maintenance.

It seems highly likely that many a business is in serious difficulties today for this very reason. On a national scale this must mean that industry is seriously undercapitalized as a result of the failure to accumulate depreciation reserves of a monetary size commensurate with the actual replacement cost of assets at the time of their replacement. Since, for income tax purposes, depreciation is allowed only as calculated on historical cost, it is clear that a large part of the deficiency of capital for replacement purposes has actually been caused by payment to the Government of what is, in effect, a tax on capital. The reminder has probably been paid to shareholders as dividends — apparently from profits but in fact from capital.

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IV. Accounting Considerations.

The problem of adjusting the distortion of profits is one of homogenising the Profit and Loss Account. A scheme is wanted which will convert dollars of all dates into dollars of the balance sheet date on some rational systematic basis. As yet no body of professional accountants, in any of the dollar or sterling countries, has agreed to adjustment of the book figures from historical to current cost by any such scheme. Short of full conversion there are, however, schemes in force aimed at counteracting specific features of the present inflation.

(a) LIFO Inventory Valuation.

Inflation of the gross profits is, particularly in the U.S.A., being offset to a rapidly increasing extent by the use of the LIFO (last in first out) system of charging out goods to production. By this means sales are matched with the most recent costs, costs which are therefore nearest to the current replacement costs, so that the margin of gross profit shown in the Trading Account will be nearest to the normal. Closing inventories are thus undervalued at the earlier costs and profits are reduced, so that the effect is automatically to conserve funds which will be available to meet inflated replacement values. For this reason, aided by the fact that the Income Tax authorities in the U.S.A. have now officially accepted LIFO as an approved method for inventory valuation, there is at present a tendency for companies to change over to LIFO. One outstanding case is that of the Caterpillar Tractor Co., and this is an excellent example of how serious a difference the method of cost valuation may make in a large company. The 1947 accounts of this company indicate by way of note that the company changed over from FIFO (first in first out) to LIFO at the year end, but they do not state the effect of this change on profits. The auditors, however, in their certificate, after stating that they approve the change, state also that the effect has been to reduce the profits by some \$3,519,148. The profits appear at \$9,956,912, so the reduction is one of over 26% on the profits of \$13,476,060, as they would have appeared under the FIFO method.

In the illustration which we studied earlier the valuation of inventories was on the FIFO basis. On the LIFO basis the closing inventory of 5,000 articles would have been valued at the earliest price, i.e. \$5 per unit, giving \$25,000 as compared with the \$26,680 under the FIFO method. This would have shown the gross profit at a reduced figure of \$15,230 instead of \$16,910, so that an extra \$1,680 would have been retained in the business, available for replacement purposes at increased prices, without the reserve being reflected in the books or the published accounts. Since the illustration started with no opening inventory, these results are a very fair comparison of the effects of the two methods of inventory valuation, in times of rising prices. But, of course, it must be borne in mind that prices will not always be rising and, in times of falling prices, the LIFO method will show correspondingly larger profits than FIFO. If, however, the traditional "lower of cost or market" rule is followed, with "market" interpreted as "replacement price", then, at such times inventories will be valued at replacement price (unless "net realisable value" is lower), and the profits will not be overstated. I should here state that my own preference, as

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far as inventory valuation for the year-end accounts is concerned, if for valuation at **cost** based always on the FIFO basis, since by any other cost method the profits for the year are affected by fortuitous purchases before balance sheet date, without any sale of the goods acquired. But I must not elaborate on this here. LIFO then will, in times of rising prices, do something to conserve funds out of profits for replacement of goods at higher prices. But the results are haphazard and hidden in the accounts. The effect is to keep the inventory shown on the balance sheet valued at prices ruling at some time in the past, largely a past becoming ever more remote, and the position is very unreal. Since dollars of all dates are mingled on the balance sheet these inventories, actually valued in dollars of a day when dollar values, in terms of real goods, were much higher, may be very much undervalued, a secret reserve existing. It is this secret reserve that provides the funds for higher replacement values. On the whole it seems much wiser to bring the reserve into the open by using the FIFO method at all times, transferring profits from surplus to an Inventories Reserve, in times of rising prices, and transferring back to surplus in times of falling prices. As far as inventories are concerned that is my preference. I regard inventories as an expense not yet assignable against any income from sales, and so to be carried forward normally at cost, rather than as an asset for valuation on the balance sheet.

(b) Indices.

Provided indices are obtainable — and, of course, it is just this provision of indices for the numerous types of capital assets that constitutes the main problem — it can be shown that their use in accounting is a relatively simple matter. The fear of professional accounting bodies in general is that, if historical accounting figures are converted to current monetary terms each year by indices, the interpretation of the accounts will become a matter of even greater confusion to shareholders and the public than has ever been the case in the past. The tendency in recent years has been to explain these things more and more clearly to the shareholders and if, just when the public are reaching the point of having received at least some training in the interpretation of accounts, confusion is introduced by means of indices, then the work of years will indeed have been sadly undone. It is quite clear that any change to be made in published accounts must be compulsory, not permissive, unless such accounts are to be merely supplemental to the unadjusted accounts. This would not cause any insuperable difficulty. It should be possible for the Government to issue indices each year for application to capital assets, classified into broad groups, with reference to a base year, say 1938. There are then two things to be done. (I) The fixed assets in the books at historical cost must be converted to cost in terms of the current monetary unit at balance sheet date, by application of appropriate indices. (II) The accumulations of depreciation in Depreciation Reserve, for the particular assets, must be converted to current monetary equivalents, so that the accumulating funds shall be adequate for replacement of the assets when they have ended their working life.

I have suggested elsewhere* that each year calculation be made, in

*Depreciation Provision & Changing Money Values, "The Accountant", 22-5-48.

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respect of each type of asset in the Plant Register, of that proportion of full replacement cost, at balance sheet date, which is attributable to the expired life of the asset up to the commencement of the current year. The excess of this figure over the figure actually written off for depreciation should be debited either to surplus or general reserve, (if there are book profits available), or, failing this, a special Capital Asset Value Adjustment Account should be debited, the credit always going to Reserve for Replacement of Capital Assets. The term Revalorisation Reserve has been suggested for such a reserve, "revalorisation" being taken as distinctive of a reserve to provide for changing monetary values.

The Capital Asset Value Adjustment Account debit balance, if any, would then be a suspense account representing deficiency of profits hitherto retained for replacement purposes, to be written off as soon as possible as an appropriation of current profits. For the current year depreciation provision should be made out of profits, calculated on the present replacement value, so that the adjustment just mentioned would bring past and present depreciation provisions into line with each other. For income tax purposes only a depreciation charge calculated on historical cost will be allowed, so, for record purposes, the debit recorded against profits should be apportioned between the charge based on original monetary cost and the extra charge for the current year. But, if any such scheme for conversion to current monetary terms were imposed by the Government then, no doubt, depreciation on current cost would be allowed for income tax purposes. Sceptics may say that this will never be but it is obvious that a perfectly sound and forceful case can be made of it. The plain facts are that book profits arrived at by setting off against sales, expressed in **current** monetary terms, depreciation calculated on the dollars actually paid years ago for the capital assets which have earned the profits, are simply not actual effective profits*. We saw this same point quite clearly in our illustration regarding changing inventories and replacement values. Part of the so-called profits, and probably quite a substantial part, represents funds which are **not** profits available for distribution, but funds which must be retained in the business to buy further assets for replacement. Even if the business were dissolved, and the profits distributed in full, part of the distribution, as compared with the position at the beginning of the current year, would represent no increased purchasing power in the hands of shareholders, but simply the amount necessary to maintain normal purchases. In regard to income tax it should be noted, of course, that if depreciation on current money values were allowed in times of rising prices the debit against profits would be restricted to this in times of falling prices. In times of rising prices it would amount to exemption from income tax on what would be, in effect, capital profits and in times of falling prices there would be a disallowance for capital losses — the disallowed portion should, for this reason, be debited to surplus or, alternatively, to a reserve previously built up for replacement of capital assets.

*See "The Economist", June 12, 1948: "What are Profits?"

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The accounting treatment of each year's current depreciation provision would be to debit the whole amount, calculated on replacement value, against profit but to split the credit between Depreciation Reserve (historical cost) and Replacement or Revalorisation Reserve. It should be noted that the Revalorisation Reserve differs from an unrealised appreciation in the value of an asset in that it will represent the actual investment in the business of further monetary units, with the same effect as if the funds were raised by a fresh capital issue.

(c) There is an interesting little book, recently published, which also concentrates on the question of some systematic, easily applied method of adjusting the books each year for (i) the current year's depreciation provision in fixed assets, in terms of the cost of replacement and (ii) the bringing of the total depreciation provided for thus far, in the books, to the equivalent replacement provision needed at current year's prices. This is "Depreciation and Renewal of Assets Having Fluctuating Values, by Angus MacBeath, C.A., A.C.W.A., published by Gee and Co. at 4/-. Here is a book by a practising accountant and cost accountant, and the suggestions it makes are eminently practical. Also here, since there is no question of general conversion of the accounts such as I shall mention shortly, there is really no need to wait for a system of conversion imposed by mandatory authority. If this system gives a reasonable method of arriving at depreciation provision, albeit the provision arrived at may not be that allowed for Income Tax, it can be given effect in the books. In principle the system provides for conversion of the actual figure paid to the figure that would have been paid in a selected basis year, by means of entries in a Plant Ledger at the time of purchase. Costs in this basic year are taken as 100% and current costs are expressed as a percentage. This determining of the required percentage is, of course, the difficult factor, subject to which it is only a question of a simple arithmetical calculation. The author says: "The percentage may be ascertained as an average for each year and applied to the purchases in that period, or . . . separately for different classes of assets, or . . . for each asset at the time of purchase." Whichever method is adopted will depend entirely upon the requirements of each business. "The percentages for each chosen period may be obtained by comparing price quotations from suppliers of the various assets, or, where the asset turnover is sufficient to justify the procedure, a business may obtain the percentages by comparing the prices which it has had to pay from time to time." By application of the appropriate percentage and insertion of the resulting basic year cost in the appropriate line of the Plant Ledger, all actual costs are converted to those of the basic year at time of purchase. From these basic figures year-end schedules can quite easily be drawn up to show (i) current year's depreciation, and (ii) accumulated depreciation since purchase, calculated, in each case, on the basic year monetary cost, in respect of like groups of assets, classified by rate of depreciation. The results are aggregated for each of (i) and (ii) and then multiplied by the current year's index to give the depreciation required for that year and for the expired life of the assets, respectively, in terms of current replacement

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costs. From these figures adjusting entries will be passed through the books similar to those mentioned under (b) above.

(d) In *The Journal of Accountancy* for February, 1948, appears an article by Mr. E. Stewart Freeman, Company Auditor and Economist of the Denison Manufacturing Co., which suggests a somewhat similar scheme to those already mentioned. That portion of the book profits required to offset "the shrinkage of the dollar capital previously contributed" is to be credited to a Capital Price Adjustment Account, the amount being "deducted at the bottom of the profit and loss statement in somewhat the same way as, but separately from, income tax. Profits could then be figured before and after this transfer as they are before and after income tax. Inflation is, in fact, a form of taxation, a levy on capital instead of a larger tax on income. The funds required by inflation, like the funds taken as taxes, are not available for any of the economic functions which profits are expected to perform." This summarises very well much of what I have been trying to express. But Mr. Freeman's "Capital Price Adjustment Account" refers to adjustment to current dollar equivalents of all the capital stock invested in the business, not merely that represented by merchandise inventories and fixed capital assets. "Sufficient dollars should be transferred from profits to capital to offset the shrinkage of the dollar capital previously contributed." This will ensure retention within the business of at least sufficient dollars to have a purchasing power equivalent to that of the original capital subscribed. In times of falling prices the entries would be reversed, the appreciation resulting from the increase in dollar purchasing value being debited to the Capital Price Adjustment Account and added at the bottom of the profit and loss statement.

Mr. Freeman deals separately with adjustment of depreciation reserve, the excess of the current year's depreciation over that calculated on historical cost being deducted from the bottom of the profit and loss statement and credited to a Reserve Price Adjustment Account. At the end of each year the balance in the account would be adjusted to that percentage of the ordinary depreciation reserve that the excess of the current year dollar cost of assets bears to the year-of-purchase dollar cost. On replacement of assets any excess of current year dollar cost over the original figure would be debited to the Reserve Price Adjustment Account and credited to Capital Price Adjustment Account. Mr. Freeman also deals with the necessity for bringing the current working capital into line with the increase of prices, either by dealing with each current asset and liability separately or by using an index applied to the total figure of net current assets. The one thing that he does not make clear is how he will reconcile his direct credit to Capital Price Adjustment Account for conservation of the original capital stock with the credits resulting from the asset adjustments. If all net assets are adjusted to current monetary equivalents then the original capital stock will be automatically maintained and no direct adjustment, such as that first mentioned, is required.

(e) Mr. Freeman's article extends the subject of adjustment by indices for changing monetary values to all the balance sheet items, except that he makes no mention of adjustment of items which con-

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stitute the Net Worth other than the original capital stock. His article must be read in detail to be fully understood and no attempt has here been made to set out his scheme in full. There is one further publication, probably the first in time in North America, on this subject of indices in accounting, to which attention should be drawn. It is already some 14 years since "Stabilised Accounting", by H. W. Sweeney, was published, expounding in detail a scheme for using the general price index to convert balance sheet and profit and loss accounts, from year to year, to a stabilised monetary basis. The index is applied to convert all real value items to current monetary equivalents of their original values. Real value items are those in regard to which price changes have an effect on the expression of value. All other items (cash, debtors, etc.) are money value items and remain unchanged in the accounts.

It is again not possible to summarise the contents of this revolutionary book, which is difficult reading and merits very close study. The result of the annual conversion of the profit and loss account and balance sheet to a stabilised basis is that there will appear in the stabilised profit and loss account, as a separate item, the economic loss (or gain) of the concern for the year, resulting from changes in money values. Thus, if the closing balance sheet shows cash \$4,000 plus accounts receivable \$5,000, minus accounts payable \$2,000, then total net money value assets will be \$7,000. If the average fall in the value of money, or rise in prices, during the year has been 20% (say from average index 125 to final 150), then there is an economic loss of 20% of \$7,000, i.e. \$1,400 at balance sheet date. If a dividend of \$3,000 is paid to shareholders at balance sheet date, then the economic loss of \$1,400, hitherto unrealised, becomes partly a realised economic loss and will be so represented in the accounts, i.e., 20% of \$3,000 or \$600. The stabilised accounts reveal quite convincingly how, where the ordinary accounts may show a net surplus, there may actually be an unrealised economic loss.

The stabilisation adjustments are recorded in a Stabilisation Adjustments Account at the end of the general ledger. This account will be square each year, simply recording the differences between the stabilised and unstabilised balances and, separately, the realised and unrealised money value loss or profit. It will probably be a long time before accountants and management are willing to give themselves the mental headaches necessary before the scheme is properly understood, let alone adopted in practice. But there is no doubt that this book deserves careful study by anyone concerned about the present difficulties of accounting adequately for rising price conditions. It has the great advantage of using a general index easily available for all companies and, therefore, suitable for application to businesses in general.

(g) For some practical suggestions from a man who occupies an important position in the business world I will turn to the remarks* of Mr. Wm. Blackie, C.P.A., Vice-President of Caterpillar Tractor Co., made in an address to the annual meeting of the National Association of Cost Accountants, of which he is a member and Past President. The

*Reported in an article by F. Sewell Bray, "The New Accounting", in "The Accountant", 11th September, 1948.

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address was entitled — "What is accounting for — now?" Mr. Blackie argues that the problem of accounting for monetary change "is merely a question of converting those original costs, which are out of time relationship, into current costs, in order that in our statements of measurement all significant entries shall rest on a homogeneous basis. Thus we should face the mechanics of the problem not as a matter of policy but as a piece of vital research into the principles of accurate accounting measurement, for such principles as we now employ are beginning to be called in question, not least by those whom we seek to serve." He proposes that a new account be opened in the capital section, e.g. Price Change Capital Account. This account would be charged or credited with the decrease or increase in the market (replacement) cost of inventories and net capital assets. Inventories would then be charged out, as used, at the adjusted price. For fixed assets the amortisation charge for the current period would be calculated on the basis of the current asset costs. The accumulating Depreciation Fund would be adjusted to conform with the revised asset costs and the provision required to bring past allocations into line would be recovered by way of the Price Change Capital Account, which, as stated above, contains the whole adjustment required to bring the original monetary cost to current cost. On retirement of the assets, the asset and depreciation fund balances will cancel each other out, and the applicable balance in the Price Change Capital Account will remain there "until such time, if ever, as it may be wiped out by contrary conditions or disposed of by proper action of the board of directors." Indexes are suggested for current assets, based on classifications by type. These suggestions do not differ in essentials from others made above, and the significant thing is that they come from a prominent businessman capable of judging of their practicability.

V. Attitude of the Accounting Profession

The American Institute of Accountants has long been investigating, through its Research Committee, the question of possible accounting adjustments, from year to year, to bring published financial accounts to a homogeneous dollar basis. Bulletin 33 of October, 1947, has now been confirmed by Council and Members and the result is, as announced in the *Journal of Accountancy* for November, 1948, that no change in present accounting methods, based on historical cost, is considered practicable or desirable under present conditions. Strong approval is given to the issue by management of supplemental statements, showing to shareholders the company's need to retain profits for replacement. A questionnaire was issued to businessmen, bankers, economists, labour leaders and others, and the replies revealed a prevailing sentiment against change, in the ratio of something like two to one, only the economists showing a majority in favour of change. But of the committee of 21 there was a minority of 4, including Prof. W. A. Paton, Professor of Accounting at the University of Michigan, who believed "that inflation has proceeded to a point where original dollar costs have already lost their practical significance and that, where depreciation is an important element of cost, the advantages which would result from

THE EFFECT OF A FLUCTUATING MONETARY UNIT

a basic change in accounting treatment outweigh the possible disadvantages to". The committee itself accepts the possibility, since the dollar is never likely to return to its pre-war value, that at some future time adjustments may have to be made in accounts on a "once-for-all" basis. But they consider that any such adjustment should be left until prices have stabilised themselves— which to me sounds very much like locking the stable door after the horse has bolted. I note that an editorial in November's "Canadian Chartered Accountant", supporting the decision of the American Institute, says: "Tinkering with a currency system or with an accounting system will not of itself stop an inflationary spiral." Of course it will not, but it is not the primary object of any proposed accounting adjustments to stop the inflationary spiral. Their object is simply to present a correct picture of the financial state of affairs having regard to changing economic conditions. This must be clearly understood.

As the most suitable commentary on the American Institute's decision, some of the remarks of Mr. G. O. May, foremost of American accountants, in an article in the December, 1947, *Journal of Accountancy*, may be quoted. He says: "I believe that the accounting profession should not merely welcome but itself seek methods of doing for capital assets what LIFO has done for inventories, thus making it possible to compute the economic income of corporations. This seems the more desirable because today our economic destinies are being, to a constantly increasing extent, determined by policies which in turn are based on statistics, and of these statistics corporation reports are among the most important and, potentially at least, the most reliable. I should like to see some bold pioneer present the results of his corporation's operations on both a monetary and an economic income basis, with as much accuracy as circumstances permit." Later he states: "If it is decided that depreciation based on the present price level is an admissible charge against income, the amount based on cost and the excess should be stated separately." Of the Institute's decision that action must await stabilisation of the price level he says: "My own belief is that changes in accounting methods should come by evolution, not by an accounting 'coup d'état' . . . I believe that the profession faces the task of bringing harmony and enlightenment out of the present inconsistency." Finally: "The application of LIFO to cases to which it seemed at first sight unsuited has been accomplished by the use of price indexes and by other methods which would be at least as suitable for use in dealing with capital assets. I believe the difficulties of doing for capital assets what LIFO has done for inventories would be relatively small." It will be gathered from these remarks that Mr. May approves of LIFO valuation of inventories, but the most pertinent fact, for our present purpose, is his acceptance of the urgent need for changes in accounting for fixed assets "by price indexes and by other methods". He speaks as a well known practising accountant and cannot be accused of academic theorising.

VI. Conclusion

In bringing my talk to a close I would like to make one reference

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to some remarks made by Mr. J. G. Glassco, President of the Ontario Institute of Chartered Accountants, as reported in the Canadian Chartered Accountant for October. He there gave his opinion that the best and most immediate step to be taken to combat the rising replacement costs of fixed assets was to adopt the Reducing Instalment method of depreciation provision. I mention this because I consider it a dangerous suggestion. North America has long been in advance of Britain in its strong preference for the Straight Line method over the Reducing Instalment method, to which Britain long adhered. But during the last few years there has been a swing over in Britain to the Straight Line method and the Institute of Chartered Accountants officially approved this preference. The only merits of the Reducing Instalment system have been claimed as (1) its relative simplicity and (2) the decreasing annual depreciation charges, levelling up increasing annual repairs expenses. But advantage (1) is dangerous and undesirable, for (a) it very often means that the rate of depreciation used is far too small, being based on the Straight Line requirements, and (b) a columnar annual record, such as the Straight Line method requires, is very desirable for many purposes and is not, in itself, a complicated matter. Advantage (2), if it has any practical application, can be obtained under the Straight Line method by the building up of a separate Repairs and Renewals Fund, by equal annual charges to revenue. Mr. Glassco praises the Reducing Instalment method as providing heavy depreciation charges for building up a replacement reserve in these years of rising prices. But there would be no such advantage in years of falling prices. Quite apart from the points already mentioned there is a strong economic argument against extra heavy charges in the earlier years of a nation's assets, in that the sinking funds thus created withdraw spending power from the consumer long before the time for replacement of the assets comes, and the effective demand is not increased until such replacement. Avenues of new investment will have to be found in the interim, and a boom may be created leading to a slump such as followed heavy investment of this nature, in the U.S.A., in the years ending in 1929. It would surely be unfortunate if Canada were to go over to the out-moded Reducing Instalment system just when nations overseas are awaking to its dangerously inexact simplicity and are abandoning it. The solution of the accounting problems which we have been discussing must be found in a more scientific and less speciously simple direction, and I trust that the suggestions made and quoted throughout this address may have given some indication of possibilities.

« STUDENT SECTION »

GENERAL ACCOUNTING

By J. D. CAMPBELL, C.A., R.I.A.

The marks obtained in the 1948 examination in Accounting 2 reflect the following pattern:

Question Number	% of total marks obtained by all candidates	% of total marks obtained by candidates answering the questions
1.	63.87	63.87
2.	55.88	62.15
3.	47.73	53.08
4.	68.52	69.10
5.	63.25	75.27
6.	69.03	69.03

The above results indicate a fairly uniform pattern with slightly lower percentages in the two theory questions namely Questions 2 and 3.

QUESTION 2 (10 marks)

The X Company Limited is incorporated under the Dominion Companies Act and has a business year which ends on April 30.

It has an authorized capital of 300,000 shares of no par value of which 50,000 shares had been issued prior to April 30th 1947, for cash at \$5.50 a share: and a further 100,000 shares were issued October 1947 for fixed assets valued at \$750,000. The company's accounts showed a deficit at April 30th, 1948, of \$105,320.

Show how these facts should be presented on the balance sheet of the X Company Limited as at April 30, 1948.

Solution 2

Capital and Surplus Share Capital

Authorized, 300,000 shares of no par value.

Issued and fully paid, 150,000 shares of which

100,000 shares were issued in October 1947 for

fixed assets valued at \$750,000 \$ 1,025,000

Deduct: Deficit as per statement attached 105,320

\$ 919,680

Note (1) A student is not entitled to assume that any portion of the proceeds of the issue of no par value shares be credited automatically to distributable surplus. This requires a special resolution of the directors.

(2) Section 112 (2) (k) of the Dominion Company's Act (1935) requires "the amount of shares of each class issued and outstanding and the amount paid thereon, showing the amount thereof issued since the date of the last balance sheet for services rendered

COST AND MANAGEMENT

for commissions, or for assets acquired since the date of the last balance sheet . . . "

While this does not require separate presentation of authorized capital (where this is in excess of outstanding capital) nevertheless this is useful information and should be included.

Comments: The answers to the question which were submitted were in general characterized by a failure on the part of the student to apply the minimum requirements as to presentation set out by the Dominion Companies Act.

An attempt was made to allow a certain degree of leeway on those items which are not specifically covered by the Dominion Companies Act but are customarily set out in a certain manner and are considered good practice.

QUESTION 3 (10 marks)

State two alternative methods of presenting the annual accounts of a company which owns a substantial portion of the outstanding stock of another company. Explain the relationships between the two methods and the comparative advantages and disadvantages of each.

Solution 3.

Based on the assumption that the holdings of a substantial portion of the outstanding stock of another company places the company whose stock is held in the category of a subsidiary the two alternative methods of presenting the annual accounts are (1) Presentation of the balance sheet of the holding company in which there will appear an asset "Investment in subsidiary Company \$....." and (2) The presentation of the consolidated balance sheet for the holding company.

The relationship between the two methods is that in the case of (2) the investment in subsidiaries has been replaced by incorporating the total assets and liabilities of the subsidiary company with those of the holding company and adjusting for the part interest by the insertion of "minority interests" on the consolidated balance sheet. Differences between the book valuation of the investment over or below the net asset values incorporated are reflected in the "excess or deficiency in purchase consideration."

Although the parent and subsidiary companies are separate corporate entities they constitute a single business organization. A consolidated balance sheet does present the combined assets and liabilities over which the directors of the holding company exercise control as to policies.

The consolidated balance sheet is prepared for the information of the shareholders of the holding company and is of no interest or use to minority shareholders or creditors of a subsidiary company, and of only limited use to the creditors of the holding company itself.

Generally a consolidated balance sheet is the most effective method of presenting the affairs of a holding company but in some circumstances its use might be misleading, as where the minority shareholdings in subsidiary companies were large or where a subsidiary was insolvent and the holding company did not intend to rescue it.

STUDENT SECTION

Comments

The primary difficulty encountered in the answer to the question arose from an interpretation as to the requirements of the question. In this respect a degree of leniency was applied and if the answer submitted could be fitted into a logical interpretation credit was given. An alternative interpretation which was accepted was the suggestion as to the carrying of the investment in subsidiary on the parent company's statement either on a cost or an equity basis.

QUESTION 1 (15 marks)

Redraft the balance sheet which is presented below with a view to correcting any errors and facilitating its interpretation by shareholders.

X LTD.

Balance Sheet as at December 31, 1947

ASSETS

Current

Balance on deposit per bank statement	\$ 2,000.00	
Accounts receivable	8,000.00	
Inventories	10,000.00	
Investment in marketable securities	3,000.00	
		\$ 23,000

Fixed

Land	5,000.00	
Buildings	7,000.00	
		12,000

LIABILITIES

\$ 35,000

Current

Accounts payable	2,250.00	
Bills payable	2,000.00	
Outstanding cheques issued but not yet presented for payment	750.00	
		\$ 5,000

Long term

Bonds payable, 6% due March 1, 1960	10,000.00	
Add: Interest accrued Sept. 1 - Dec. 31, 1947	200.00	
		\$ 10,200

Reserves

Reserve for decline in value of investments	1,000.00	
General reserve	2,000.00	
Reserve for depreciation buildings	1,500.00	
Reserve for income taxes	500.00	
		\$ 5,000

Capital

Capital stock 500 shares of a par value of \$10.00 each issued and fully paid	5,000	
Earned surplus	8,800	
Premium on shares	1,000	
		\$ 35,000

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Note: Merchandise inventory is valued at the lower of cost or market. The cost of the investments was \$3,000.00 and their present market value is \$2,500.00. Fixed assets are recorded at cost.

Solution 1.

X LTD.

Balance sheet as at December 31, 1947

ASSETS

Current	
Cash in bank	\$ 1,250
Accounts receivable	8,000
Investments in marketable securities at cost	
less reserve for decline in value of \$1,000	
(market value \$2,500.00)	2,000
Inventories valued at the lower of cost or market	10,000
	\$ 21,250
Fixed at cost	
Land	5,000
Buildings	7,000
Less Reserve for depreciation	1,500
	5,500
	10,500
	\$ 31,750

LIABILITIES AND PROPRIETORSHIP CURRENT LIABILITIES

Accounts payable	2,250
Bills payable	2,000
Accrued Liabilities (interest on bonds)	200
Estimated liability for income taxes	500
	\$ 4,950
Deferred liability Bonds payable, 6% due March 1, 1960	10,000
Total liabilities	\$ 14,950

CAPITAL AND SURPLUS

Share capital: Issued and fully paid,	
500 shares of a par value of \$10 each	\$ 5,000
Premium received on shares issued	1,000
	6,000
Earned surplus, per statement attached	8,800
General reserve	2,000
	\$ 16,800
	\$ 31,750

Comments

The primary difficulties encountered in the problem arose (1) proper classification of reserves (2) indicating the basis of valuation of the assets, in respect to which the information was available.

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